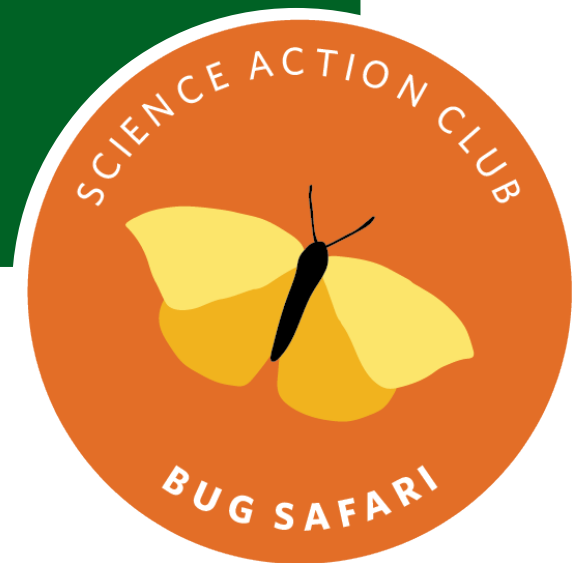
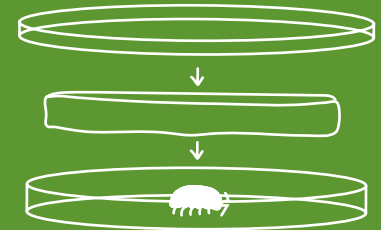


Embark on a Bug Safari



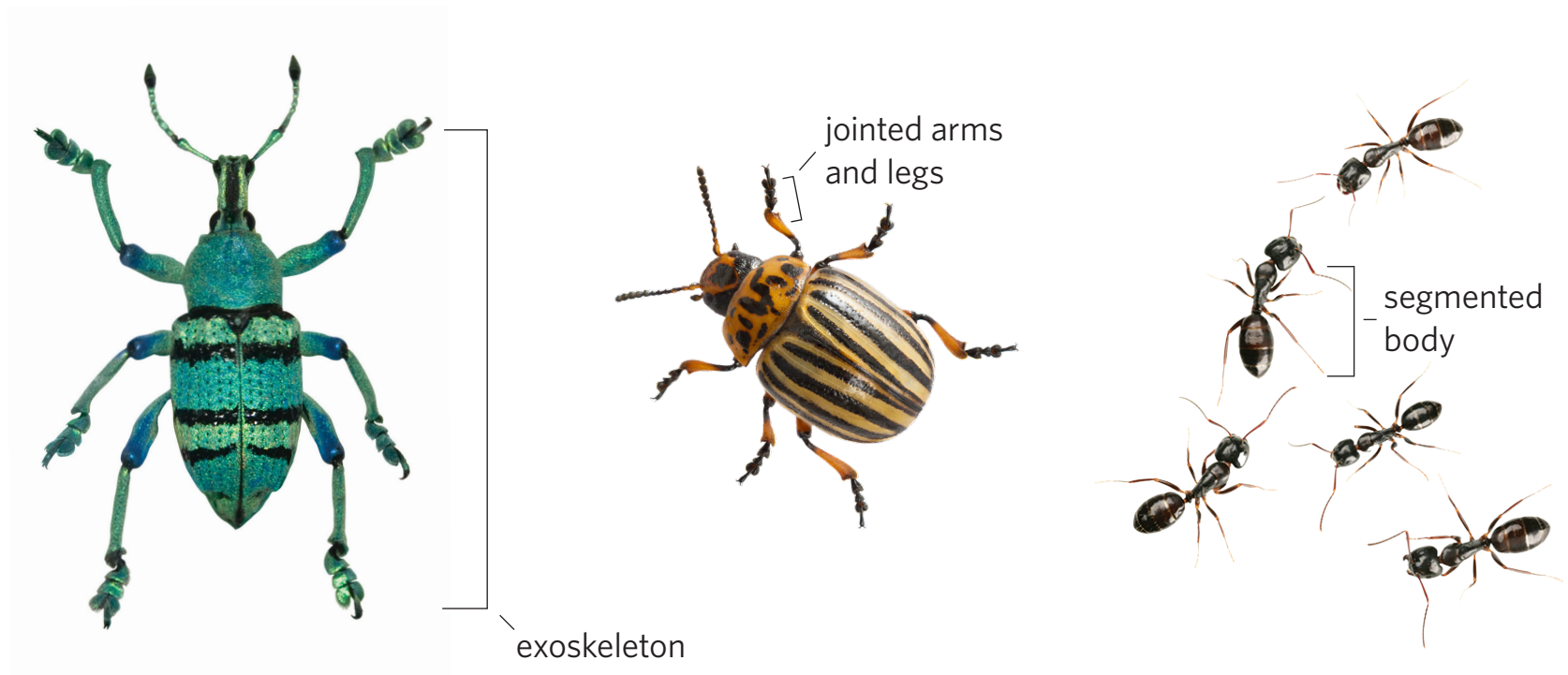
1

What is a Bug Safari?

A Bug Safari is a scientific search for arthropods that you can do anywhere—inside your home, in backyards, or even in a parking lot. The goal is to make observations and document what you see using iNaturalist.

What is an arthropod?

Arthropods (pronounced are-throw-pods) are organisms that have an exoskeleton, segmented body, and jointed arms and legs. For example, spiders, butterflies, and ants are arthropods. So are scorpions, crabs, and lobsters. These organisms represent 80% of all animals and 75% of all living things on Earth, and they play an important role in keeping our planet healthy.



2 Tools of the Trade

Today you're going to practice using tools that entomologists (scientists who study bugs) use to collect and identify arthropods. You can make these tools using objects found at home. You'll use these tools when you conduct your Bug Safari.

Beating sheet:

A beating sheet is a piece of light-colored fabric that can be placed or held under a bush or tree branch. Gently shake or tap the plant so arthropods fall out onto the beating sheet, and then collect and observe what you find.



Petri dish, foam, and brush:

A petri dish can briefly hold arthropods while you observe and photograph them. Place the petri dish close to an arthropod and use a brush to gently coax it into the dish. Place a piece of foam gently on top to secure the arthropod in place but be careful not to squish it. Avoid touching arthropods with your hands.



Magnifying lens:

A magnifying lens is used to enlarge the details of arthropods that the naked eye may find hard to see. Hold the lens to your eye and move yourself closer to the object you are observing until the object's details come into focus. If you don't have a magnifying lens you can use the zoom function on your phone.



As scientists, it is important to treat every specimen with respect and protect life wherever possible. Here are some tips for how to safely handle and return arthropods to their habitats.

- » After you are done with the beating sheet, gently shake it out onto the same bush or ground near where you collected specimens.
- » Open your petri dish and coax the arthropod back into its habitat using the brush. Do not drop arthropods from above.
- » Never destroy a web to collect a spider, take a photo instead.
- » A petri dish is not to be used with live moths and butterflies because it can damage their wings.
- » Always use tools—not your hands—to collect arthropods.
- » Always use an empty petri dish for each arthropod.
- » Return everything—dead or alive—when you are done. If your arthropod is alive, get as close as possible to the spot where it was collected.

3

Head outside for a Bug Safari

Now you are officially ready to embark on your Bug Safari. Use the tools of the trade to collect arthropods in your neighborhood and use a mobile device to take photos of them. Then, upload those photos to iNaturalist to identify and record your observations. If it's not safe for you to be outdoors, you can stay inside and conduct your Bug Safari in any room in your home. Reference the *City Bug Safari* video for step-by-step directions.

City Bug Safari

Use the video titled *City Bug Safari* as a step-by-step guide when embarking on a Bug Safari.